

CLAIMS

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1. A process for forming a conductive layer on a substrate, comprising the steps of depositing ink on the substrate by means of lithographic printing to form a seeding layer, and depositing a first electrically conducting layer on the seeding layer by electroless deposition.

2. A process as claimed in claim 1, comprising the step of electroplating a second electrically conducting layer onto the first electrically conducting layer.

3. ~~A process as claimed in any preceding claim, wherein the substrate is formed from a polymer into a flexible sheet.~~

4. A process as claimed in any preceding claim, wherein the substrate is coated with a copolymer adhesive.

5. A process as claimed in any preceding claim, wherein the ink comprises a particulate material suspended in a mixture of a resin and an organic solvent.

6. A process as claimed in claim 5, wherein said material is a metal or carbon.

7. A process as claimed in claim 5 or 6, wherein the resin is a polymer having amide groups.

8. A process as claimed in any preceding claim, wherein the thickness of the seeding layer is from 3 to 5 μ m.

9. A process as claimed in any preceding claim, wherein the thickness of the first electrically conducting layer is up to 4 μ m.

10. A process as claimed in any preceding claim, wherein the thickness of the first electrically conducting layer is about 0.25 μ m.

11. A process as claimed in any preceding claim, wherein the first electrically
5 conducting layer is formed from copper, palladium, silver, gold, platinum, nickel.

12. A process as claimed in any preceding claim, including the step of soldering an electrical component on the substrate.

10 13. A process as claimed in any of claims 1 to 11, including the step of attaching an electrical component to the first or second conducting layer by means of a conductive polymer adhesive.

14. A electrical assembly comprising a substrate having at least one electrically
15 conducting layer, which layer has been formed by a process as claimed in any of claims 1 to 13.

15. A lithographic ink for use in a lithographic printing process onto a polymer
20 substrate, the ink comprising a particulate material suspended in a mixture of a resin and an organic solvent, wherein the resin comprises a polyamide.

16. An ink as claimed in claim 15, wherein said material is a metal or carbon.

17. An interconnect for a battery which is formed by a process as claimed in any
25 of claims 1 to 13.

~~18. A battery including an interconnect as claimed in claim 17.~~

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